## METHOD AND SYSTEM FOR EFFICIENT FLOW CONTROL FOR CLIENT DATA FRAMES OVER GFP ACROSS A SONET/SDH TRANSPORT PATH

## ABSTRACT OF THE DISCLOSURE

A method and system for flow control of GFP-encapsulated client data frames over SONET/SDH transport networks is described. Transport interfaces, in the form of port cards, have FIFO buffers for receiving the GFP frames. In acknowledgment of the received frames, a transmitting transport interface receives an acknowledgement in form of a returned frame sequence number tag along with the available capacity in bytes of the buffer of the receiving transport interface. With a continuous update of buffer capacity and tracking the number of bytes in transit to the receiving transport interface, the transmitting transport interface maximizes the utilization of the channel through the SONET/SDH transport network, even with dropped frames or dropped acknowledgment tags.